



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/669,235	09/24/2003	Ernest Tsui	884.932US1	3548

7590 03/16/2006
Schwegman, Lundberg, Woessner & Kluth, P.A.
P.O. Box 2938
Minneapolis, MN 55402

EXAMINER

SANTIAGO CORDERO, MARIVELISSE

ART UNIT	PAPER NUMBER
----------	--------------

2687

DATE MAILED: 03/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/669,235	Applicant(s) TSUI, ERNEST	
	Examiner Marivelisse Santiago-Cordero	Art Unit 2687	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments see Remarks, filed on 2/23/06, with respect to the rejection(s) of claim(s) 1-28 under 35 U.S.C § 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Anderson (Patent No.: 6,161,013).

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 11 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 11, it is not clear how the first receiver operates on a first frequency band wherein the first frequency band forms a subset of a second frequency band that is utilized by the second receiver. From the claim language, it appears as if the first and second receivers operate on an overlapping frequency portion (subset). The specification fails to provide clarification of this issue. For examination on the merits, the claims will be interpreted as best understood; the first and second frequency bands will be treated as different frequency bands.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 2687

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-8, 13-17, 19-22, 24-26, and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Anderson (Patent No.: 6,161,013).

Regarding claim 1, Anderson discloses a method comprising: searching for a benefit associated with switching from receiving first information from a first network to receiving second information from a second network (Fig. 4; col. 15, lines 42-67); and downloading a demodulation code to demodulate the second information received from the second network (col. 15, lines 42-67).

Regarding claim 2, Anderson discloses the method of claim 1 (see above), wherein the second information is a continuation of the first information (col. 16, lines 39-41).

Regarding claim 3, Anderson discloses the method of claim 1 (see above), further comprising: selecting the demodulation code from a plurality of codes (col. 3, lines 6-27; col. 15, lines 42-67).

Regarding claim 4, Anderson discloses the method of claim 1 (see above), further comprising: determining which of a plurality of networks including the second network is available to transmit the second information (col. 15, lines 42-67).

Regarding claim 5, Anderson discloses the method of claim 1 (see above), further comprising: selecting the modulation code associated with the demodulation code (col. 15, lines 42-67; note that this is inherently present in Anderson in order to properly establish communication); and downloading the modulation code (col. 15, lines 42-67).

Regarding claim 6, Anderson discloses a method comprising: determining the existence of a second protocol at a device communicatively coupled to a first protocol (Fig. 4; col. 15, lines

27-67; note that Examiner's interpretation is supported by paragraph [0016] of originally filed Specification which states that the protocols may be different or the same); determining a benefit associated with communicatively coupling the device to the second protocol (col. 15, lines 42-67) and decoupling the device from the first protocol (col. 15, lines 42-67; col. 16, lines 42-54); and downloading to the device a demodulation code associated with the second protocol (col. 15, lines 42-67).

Regarding claim 7, Anderson discloses the method of claim 6 (see above), wherein the first protocol and the second protocol are included in a single network (Fig. 4; col. 15, lines 27-67; note the handover from BS 405 to BS 104; also note that the BS 405 and 104 and BSC 407 is interpreted as a single network; Examiner's interpretation is supported by paragraph [0016] of originally filed Specification which states that the protocols may be different or the same).

Regarding claim 8, Anderson discloses the method of claim 6 (see above), wherein the first protocol is included in a first network and wherein the second protocol is included in a second network (Fig. 4; col. 15, lines 27-67; note the handover from BS 405 to BS 406; also note that the BS 405 and 104 and BSC 407 is interpreted as a first network and that the BS 406 and BSC 408 is interpreted as a second network; Examiner's interpretation is supported by paragraph [0016] of originally filed Specification which states that the protocols and the networks may be different or the same).

Regarding claim 13, Anderson discloses the method of claim 6 (see above), further comprising coupling the device to the first protocol using a multiplexed receiver (col. 3, lines 34-36; col. 15, lines 42-67); and determining the existence of the second protocol using the multiplexed receiver (col. 3, lines 34-36; col. 15, lines 42-67).

Regarding claim 14, Anderson discloses the method of claim 6 (see above), further comprising: selecting the modulation code associated with the demodulation code (col. 15, lines 42-67; note that this is inherently present in Anderson in order to properly establish communication); and downloading the modulation code (col. 15, lines 42-67).

Regarding claim 15, Anderson discloses an article comprising a machine-accessible medium having associated data, wherein the data, when accessed, results in a machine performing: searching for a benefit associated with switching from receiving first information from a first network to receiving second information from a second network (Fig. 4; col. 15, lines 42-67); and downloading a demodulation code to demodulate the second information received from the second network (col. 15, lines 42-67).

Regarding claim 16, Anderson discloses the article of claim 15 (see above), wherein the data, when accessed, results in the machine performing: determining the existence of all available networks including the second network (col. 15, lines 42-67); and selecting the demodulation code from a plurality of codes (col. 3, lines 6-27; col. 15, lines 42-67).

Regarding claim 17, Anderson discloses the article of claim 15 (see above), wherein a value of the benefit is associated with at least one of a network type, a network capability, a network activity level, a signal strength, a quality of service, a bandwidth, a signal-to-noise ratio, a signal-to-interference ratio, a multipath condition, a service provider, a monetary cost, user-preferred information, and a user-preferred service (col. 15, lines 42-67).

Regarding claim 19, Anderson discloses the article of claim 15 (see above), wherein the data, when accessed, results in the machine performing: selecting the modulation code associated with the demodulation code (col. 15, lines 42-67; note that this is inherently present in Anderson

in order to properly establish communication); and downloading the modulation code (col. 15, lines 42-67).

Regarding claim 20, Anderson discloses an apparatus, comprising: a receiver (inherently present) to search for a benefit associated with switching from receiving first information from a first network to receiving second information from a second network (Fig. 4; col. 15, lines 42-67); a module (inherently present) to download a demodulation code to demodulate the second information (col. 15, lines 42-67); and a processor (inherently present) to couple to the receiver and to the module to download the demodulation code (col. 15, lines 42-67).

Regarding claim 21, Anderson discloses the apparatus of claim 20 (see above), wherein the apparatus further comprises: a demodulator operated by accessing the demodulation code (col. 4, lines 6-27; col. 15, lines 42-67).

Regarding claim 22, Anderson discloses the apparatus of claim 20 (see above), wherein the receiver comprises a multiplexed receiver to couple the processor to the first network and the second network (col. 3, lines 34-36; col. 15, lines 42-67).

Regarding claim 24, Anderson discloses a system, comprising: a receiver (inherently present) to search for a benefit associated with switching from receiving first information from a first network to receiving second information from a second network (Fig. 4; col. 15, lines 42-67); a module (inherently present) to download a demodulation code associated with the second information (col. 15, lines 42-67);

a processor (inherently present) to couple to the receiver and to the module to download the demodulation code (col. 15, lines 42-67); and an omnidirectional antenna to couple to the receiver (col. 12, lines 7-10).

Regarding claim 25, Anderson discloses the system of claim 24 (see above), further comprising: a comparison module (inherently present) coupled to the receiver to compare a value of the benefit (col. 15, lines 42-67).

Regarding claim 26, Anderson discloses the system of claim 25 (see above), wherein the value of the benefit is associated with at least one of a network type, a network capability, a network activity level, a signal strength, a quality of service, a bandwidth, a signal-to-noise ratio, a signal-to-interference ratio, a multipath condition, a service provider, a monetary cost, user-preferred information, and a user-preferred service (col. 15, lines 42-67).

Regarding claim 28, Anderson discloses the system of claim 24 (see above), wherein an information type associated with the first information is the same as an information type associated with the second information (col. 16, lines 39-41).

Claim Rejections - 35 USC § 103

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. Claims 9-12, 23 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson in view of Sagi et al. (hereinafter "Sagi"; Pub. No.: US 2004/0264410).

Regarding claim 9, Anderson discloses the method of claim 8 (see above). Anderson fails to specifically disclose wherein the first network comprises a wide area network, and the second network comprises a wireless local area network.

However, in the same field of endeavor, Sagi discloses wherein the first network comprises a wide area network, and the second network comprises a wireless local area network (Fig. 2).

Therefore, it would have been obvious to one of ordinary skill in this art at the time of invention by applicant to modify the networks of Anderson wherein the first network comprises a wide area network, and the second network comprises a wireless local area network as suggested by Sagi because they are commonly-known, widely available networks, they would provide the communication unit with dual mode functionality (Sagi: page 2, paragraph [0023]), would provide more convenience for the user and, additionally, WLAN are less expensive (Sagi: page 1, paragraph [0004]).

Regarding claim 10, Anderson discloses the method of claim 6 (see above). Anderson fails to specifically disclose further comprising: determining the existence of the second protocol using a second receiver; and coupling the device to the first protocol using a first receiver.

However, in the same field of endeavor, Sagi discloses determining the existence of the second protocol using a second receiver; and coupling the device to the first protocol using a first receiver (Fig. 2; page 2, paragraphs [0021]-[0023]).

Therefore, it would have been obvious to one of ordinary skill in this art at the time of invention by applicant to modify the method of Anderson by determining the existence of the second protocol using a second receiver; and coupling the device to the first protocol using a first receiver as suggested by Sagi because they would provide the unit with dual operating mode capability (Sagi: page 2, paragraph [0023]).

Regarding claim 11, in the obvious combination, Sagi discloses wherein the first receiver operates on a first frequency band forming a subset of a second frequency band utilized by the second receiver (page 2, paragraph [0019], [0021]-[0022]).

Art Unit: 2687

Regarding claim 12, in the obvious combination, Anderson discloses wherein the second receiver acquires sufficient information to select the demodulation code without solicitation (col. 14, line 61 through col. 15, lines 3 and 42-67).

Regarding claim 23, Anderson discloses the apparatus of claim 20 (see above). Anderson fails to specifically disclose further comprising: a second receiver to couple the processor to the first network and to the second network.

However, in the same field of endeavor, Sagi discloses further comprising: a second receiver to couple the processor to the first network and to the second network (Fig. 2; paragraph [0023]).

Therefore, it would have been obvious to one of ordinary skill in this art at the time of invention by applicant to modify the system of Anderson to incorporate a second receiver to couple the processor to the first network and to the second network as suggested by Sagi because they would provide the unit with dual operating mode capability (Sagi: page 2, paragraph [0023]).

Regarding claim 27, Anderson discloses the system of claim 24 (see above). Anderson fails to specifically disclose further comprising: a second receiver to couple the processor to the first network and to the second network.

However, in the same field of endeavor, Sagi discloses further comprising: a second receiver to couple the processor to the first network and to the second network (Fig. 2; paragraph [0023]).

Therefore, it would have been obvious to one of ordinary skill in this art at the time of invention by applicant to modify the system of Anderson to incorporate a second receiver to

Art Unit: 2687

couple the processor to the first network and to the second network as suggested by Sagi because they would provide the unit with dual operating mode capability (Sagi: page 2, paragraph [0023]).

8. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson in view of Jagadeesan et al. (hereinafter "Jagadeesan"; cited in form PTO-892, paper no. 20050708)

Regarding claim 18, Anderson discloses the article of claim 15 (see above). Anderson fails to specifically disclose wherein the data, when accessed, results in the machine performing: selecting the benefit according to a pecuniary relationship.

However, in the same field of endeavor, Jagadeesan discloses selecting the benefit according to a pecuniary relationship (page 2, paragraph [0017]).

Therefore, it would have been obvious to one of ordinary skill in this art at the time of invention by applicant to select the benefit of Anderson according to a pecuniary relationship as suggested by Jagadeesan because a subscription or an agreement may be provided by the networks to offer services to an end user (Jagadeesan: page 2, paragraph [0017]); and would be more convenient.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Reddy (Pub. No.: US 2004/0023669) discloses handover between a cellular network and a WLAN network; Papasakellariou (Patent No.: US 6,526,090) discloses demodulation element assignment for a receiver capable of simultaneously demodulating multiple spread spectrum signals; Ozluturk (Patent No.: US 6,754,497) discloses seamless handoff; Tiedemann, JR. (Pub. No.: US 2004/007113) discloses performing idle handoff.

Art Unit: 2687

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marivelisse Santiago-Cordero whose telephone number is (571) 272-7839. The examiner can normally be reached on Monday through Friday from 7:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

msc 3/9/06

MSC



LESTER G. KINCAID
SUPERVISORY PRIMARY EXAMINER